

**Remarks before the Commonwealth Club of California
“The Challenges of Nonproliferation in Today’s Nuclear World”**

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It is an honor to address the Commonwealth Club, which for over a century has been identified with thoughtful consideration of important issues of public policy.

Tonight, I would like to talk about the challenges of nonproliferation in today’s nuclear world, a world in which nuclear terrorism is a very real global concern. Much of the world’s attention is focused on Iran and North Korea and their apparent determination to isolate themselves from the international community by seeking nuclear weapons. These are very important issues, they demand our attention, and the President and the Administration are devoting tremendous efforts towards resolving them. In many ways, however, Iran and North Korea pale in comparison to the threat of nuclear terrorism. The overwhelming military power of the United States, including its nuclear capabilities, means that even a nuclear-armed rogue state would be hesitant to attack us, our allies or our interests, for fear of the inevitable, devastating retaliation.

In contrast, terrorist groups are more difficult to deter through threats of retaliation because they lack fixed assets that can be held at risk. While we do not believe that any terrorist group is currently able to launch a nuclear attack against the United States or its friends, there is ample evidence that terrorists want this capability and would have no inhibition against using it.

This is not simply my own view. This weekend, at their Saint Petersburg summit, the leaders of the G-8 nations said the following:

The proliferation of weapons of mass destruction...together with international terrorism remain the pre-eminent threat to international peace and security. The international community must therefore...act decisively to tackle this threat. We reaffirm our determination and commitment to work together and with other states and institutions in the fight against the proliferation of [weapons of mass destruction], including by preventing them from falling into hands of terrorists.

Since the earliest days of his presidency, President Bush has focused on the threat of nuclear proliferation and nuclear terrorism. Under the President’s leadership the United States has used established diplomatic organizations like the United Nations, leading to Security Council Resolution 1540, which requires states to establish legal mechanisms to inhibit nuclear proliferation. It has worked to strengthen existing regimes,

for example by leading the way to the creation of the Committee on Safeguards and Verification of the International Atomic Energy Agency. It has led the way through voluntary coalitions such as the Proliferation Security Initiative and the new Global Initiative To Combat Nuclear Terrorism announced by President Bush and President Putin this weekend. It has led the way in quiet efforts such as convincing Libya to renounce its nuclear ambitions after decades. And, when necessary, the President has shown the courage to act alone. Today that leadership, determination, and flexibility remains evident in the President's approach to Iran and North Korea as well as to nuclear nonproliferation and the prevention of nuclear terrorism more generally.

From the very beginning, the President has given priority to keeping the world's most dangerous materials out of the hands of the world's most dangerous people. This fight against nuclear terrorism, integrally related to traditional nonproliferation, was given new impetus after the attack on the United States on September 11, 2001. The Department of Energy and the National Nuclear Security Administration are playing leading roles in this aspect of the President's Global War On Terror. We are two-thirds of the way through the Administration. Let me tell you some of what we have accomplished.

Much of our emphasis has been focused on Russia because that is where the greatest amount of poorly secured material was when we took office. We are working on many fronts in Russia and have made remarkable progress. This year we will complete improving the security of Russian Navy weapons and nuclear fuel, a full two years ahead of the schedule we inherited. By the end of 2008, we will complete security upgrades throughout the far-flung establishment of the Russian Federal Agency for Atomic Energy, our nuclear counterpart. Last year, the United States and Russia agreed to a list of military sites where we would jointly work to upgrade security. Upgrades at those sites will be finished at the end of 2008, as well.

We have accelerated our efforts as a result of the Joint Statement on Nuclear Security by Presidents Bush and Putin following their February 2005 meeting in Bratislava, Slovak Republic. The Bratislava Nuclear Security Initiative called for enhanced nuclear security cooperation in five areas: Emergency Response; Best Practices; Security Culture; Research Reactors; and Material Protection, Control and Accounting. What is most important about this statement is not the details, but the fact that it indicates that the upper echelons of the Russian Government appreciate the gravity that we place on nuclear security issues. We saw a reaffirmation of that commonality of purpose when the two Presidents met in Saint Petersburg three days ago.

Russia is not the only place with material that could be used for nuclear weapons. We have also made major improvements in security throughout the former Soviet Union. One area of global concern is research reactors, which often use a uranium fuel that could be suitable for nuclear terrorism. Because research reactors often have limited security, our Global Threat Reduction Initiative works to convert research reactors worldwide from the use of highly enriched uranium (HEU) to low enriched uranium. This program repatriates the U.S. and Russian-supplied HEU from these facilities to its country of origin as well as upgrading research reactor physical security.

Our security assistance programs in Russia, the former Soviet republics, and elsewhere dramatically reduce the risk of nuclear material theft. But, every security system depends on the people operating it. Motivated by greed, coercion, or debt, facility insiders may successfully divert nuclear materials. The large number of nuclear facilities - each presenting a unique opportunity for material diversion - compounds this problem. As a result, our cooperation goes far beyond improving physical security. We also work to put in place systems to ensure personnel reliability. As part of this effort we are exchanging "best practices" in security and in handling nuclear materials with a number of countries, including Russia. We are encouraging Russia and others to commit the necessary resources to sustain the upgrades we have made together and to promote a strong nuclear security culture.

The best way to prevent nuclear terrorism is to ensure that nuclear materials are secure at the source. That is why we have given priority to improving physical security. But, because of the human factor, we must consider the possibility that material will be stolen and that we may be unaware of that fact. As a natural complement to improving security, our Second Line of Defense Program works to enhance our foreign partners' ability to interdict illicit trafficking in nuclear and radiological material. Under this program, we deploy radiation detection systems at high-risk border crossings, increasing the likelihood of detection and interdiction of stolen nuclear materials.

We established the Megaports program in 2003, as an extension of Second Line of Defense, to help address the threat that terrorists could use the global maritime shipping network to smuggle nuclear or other radiological material, or even to deliver a weapon for detonation within the United States. Under Megaports, the United States installs radiation detection systems at foreign ports to enhance detection capabilities of our partner countries. In return, we require that data be shared on all detections and seizures of material.

We have made steady progress in this program over the last three years. Megaports is now operational in ports within the Netherlands, Greece, Spain, Singapore, Sri Lanka and the Bahamas. We are at various stages of implementation in 15 additional ports within 11 countries and Taiwan, and are aggressively pursuing agreements with approximately 20 other countries. We work closely with the Department of Homeland Security's Container Security Initiative. The Megaports Initiative is a key component of the Administration's overall strategy to prevent the diversion of nuclear weapons and material.

Improving material security and interdicting nuclear smuggling is not enough. There is simply too much nuclear material in the world, enough for tens of thousands of weapons. An integral part of our strategy therefore has been to induce other states to stop producing materials for nuclear weapons, as the United States stopped doing years ago. The United States recently tabled a draft treaty to do just that, but here, as elsewhere, we supplement international diplomatic efforts with bilateral programs. Russia still produces weapons plutonium because the reactors that do so also supply heat and light to local communities. We are working together with the Russians to replace that capability. When the Administration leaves office, two of the three plutonium producing reactors in

Russia will have been shut down forever. The third and final one will cease operations in 2010.

Ending production of nuclear materials for weapons use is necessary, but not sufficient. We must also worry about enrichment of uranium or reprocessing of spent fuel for allegedly peaceful uses. Therefore, in 2004, the President proposed a bold new international regime where nations would have no need to develop new capabilities to enrich or reprocess nuclear fuel, but would still have assured access to the benefits of nuclear power. He expanded on that notion earlier this year with the visionary Global Nuclear Energy Partnership, which holds open the possibility of a future of environmentally clean nuclear energy, far less nuclear waste to dispose of, and extremely strong safeguards against proliferation.

We also need to deal with the tons of weapons material that already exists. The United States is setting an example by recycling substantial quantities of weapons-usable highly enriched uranium for peaceful, civilian, energy-generating purposes. We down blend this material to the lower enrichment suitable for commercial reactors. Just last month we made our 200th shipment of low enriched uranium for fabrication into commercial nuclear fuel for use in Tennessee Valley Authority reactors.

We are also working to eliminate Russian highly enriched uranium. Under the Megatons to Megawatts Program, we continue to blend down Russian HEU and burn it in commercial reactors in the United States. Nuclear power generates 20 percent of American electricity, and half of that is generated by fuel derived from Russian HEU. That means one in ten American light bulbs is powered by former Soviet atom bombs.

In addition to these efforts on highly enriched uranium, the United States and Russia have each committed to dispose of 34 metric tons of surplus weapon-grade plutonium. The United States will dispose of its plutonium by converting it to mixed uranium-plutonium oxide fuel, or MOX fuel, and irradiating it in commercial reactors. We expect to begin construction of the MOX fuel fabrication facility in South Carolina this fall.

Our Russian counterparts are moving more slowly and are reevaluating the technical approach they will use to dispose of their own plutonium. The Russian government told us, told members of Congress, and told the international community that they remain committed to dispose of 34 metric tons of plutonium. We expect them to keep this commitment and will work with them to achieve it.

As a final layer of protection against an attempt to detonate a nuclear device in the United States, the National Nuclear Security Administration maintains nuclear emergency response teams that can search for clandestine transport of nuclear materials or weapons, and disarm a terrorist nuclear device, if necessary. These teams work in close partnership with the Departments of Defense and Homeland Security, and the FBI.

In this area as well, we have begun to build international cooperation. Under the Bratislava process, we have initiated a nuclear emergency dialogue with Russia. Through

some two years of interactions between experts, including participation in exercises held in both countries, we have greatly improved our understanding of how the Russians approach this potentially very sensitive subject, and developed contacts that could be extremely useful in a real-world nuclear emergency. I have been pleased with the seriousness with which both sides are approaching this effort.

The efforts that I have described involve protecting fissile material, but I do not want to suggest that is all that we are doing. What A.Q. Khan has reminded us is that we cannot ignore the diffusion of critical technologies that turn the nuclear material into a weapon. We are using U.N. Security Council Resolution 1540, which establishes an international requirement to criminalize WMD proliferation as a lever to encourage states to strengthen their export control laws and improve enforcement of those laws. Here too international cooperation is crucial. We are engaging scientific research institutes, industry, government agencies and customs departments in over 40 countries - in Asia, Europe, the Middle East, and Latin America - to help them identify these technologies and make sure that they are not sold or traded to those who will misuse them.

In each of these programs, U.S. leadership is making the nation and the world safer. Because we are the world's leader, the President knows that we need to set the example. We have dramatically improved security of nuclear materials throughout the Department of Energy's National Nuclear Security Administration. We have announced reductions in our own nuclear stockpile which, when implemented in 2012, will lead to the smallest stockpile since the Eisenhower administration. The transformation of our nuclear weapons complex made possible by the Reliable Replacement Warhead will, I hope, allow even deeper reductions, consistent with the President's vision for the smallest possible stockpile consistent with our national security requirements.

We have long since ended enrichment of uranium or production of plutonium for nuclear weapons. We have withdrawn over 200 tons of highly enriched uranium from weapons use. Some of that will power our nuclear submarines for the next 50 years, obviating any need to enrich uranium for any military purpose. Seventeen tons will be blended down and used as a fuel supply of last resort as part of the President's global effort to limit the spread of enrichment and reprocessing technology. Our record is broad and impressive and we are proud of it. You should be too.

No responsibility of government is more important than preserving the security and freedom of the United States. Keeping our country safe from nuclear terrorism requires the building of strong international bonds and relationships not just by national governments, but also by police forces, border guards, cities, communities, harbors, research institutes, and factories. We are building those bonds.

Keeping our country safe from nuclear terrorism requires sustained dedicated effort by devoted civil servants, laboratory scientists, and leaders in the national security community. We have an exceptional group of men and women working on countering the nuclear threat.

Keeping our country safe from nuclear terrorism requires strong support from the Congress. We have such support. In an era of partisanship, this area has been a welcome oasis of harmony.

Above all, keeping our country safe from nuclear terrorism requires strong, determined and consistent leadership. From the President on down we have that leadership. Our approach involves cooperation among nations and respect for international agreements. It involves creative use of technology. Where necessary, it involves the use of force. In short, it involves all the instruments of national power.

In a statement issued following their meeting last Friday, President Bush and Russian President Putin said, "Through our cooperation in the field of nuclear nonproliferation we seek to improve the security of our own peoples and of all others in the world community." As this statement makes clear, preventing nuclear terrorism is perhaps the national security issue of our age, not just for America but also for the entire world. The United States is determined to ensure that the threat of nuclear terrorism never becomes a reality, here or abroad. We will not fail.